NOAA Climate Goal Newsletter

Upcoming events: NOAA Workshop on Climate and Living Marine Resources, May 13-15, 2008, Seattle, WA; Alaska Workshop on Expanding the U.S. Climate Reference Network (USCRN) Anchorage, Alaska, May 21-23, 2008; CIMR – Climate Information for Managing Risks Partnerships and Solutions for Agriculture and Natural Resources, June 10-13, 2008, St. Pete Beach, Florida

Geophysical Fluid Dynamics Laboratory (GFDL) Hosts Earth Science Women's Network (ESWN) In March, GFDL hosted the first leadership board meeting of the ESWN. ESWN is a peer-mentoring network of over 600 women in the Earth Sciences, most in the early stages of their careers. Members work in nine countries, with the largest representation from U.S. institutions, including universities, government agencies, and research organizations. GFDL research scientist Arlene Fiore is a founding member of ESWN. At this first meeting, board members began planning for a NOAA-funded training workshop to be held in December on advancement within scientific organizations. The meeting also allowed members to discuss the direction, structure, and goals of the organization. Outcomes of the discussions at the ESWN board meeting are posted on the ESWN web site shortly (http://www.sage.wisc.edu/eswn/).

Pictured from left to right: ESWN board members Kim Popendorf, Tracey Holloway, Christine Wiedinmyer, Allison Steiner, Arlene Fiore, Meredith Hastings, Galen McKinley, MPOWIR representative Victoria Coles, NOAA OAR representatives Cassandra Barnes and Sandra Knight. (Source: Maria Setzer)

6th Annual Climate Prediction Applications Science Workshop (CPASW) The 6th Annual CPASW brought together a diverse group of climate applications researchers, climate product developers , and users to discuss developments in research and applications related to climate services and the use of climate predictions in societal decision-making. Attendees learned about new climate prediction applications research, networked across climate-sensitive communities, heard about impacts of climate forecasts on environmental-societal interactions, and provided feedback on user requirements to producers of climate products. Approximately 30 projects described at the workshop involved individuals who received funding from NOAA. One common theme was that high degrees of integration and collaboration between research, operational, and user organizations and involving Federal, state, and local partners lead to rapid and clear improvements in climate related decision support tools. The National Weather Service's (NWS) Climate Services Division (CSD) and the Southeast Regional Climate Center at the University of North Carolina co-hosted this 6th Annual workshop in Chapel Hill, North Carolina. For more information visit: www.sercc.com/ cpasw_program.htm. *(Sources: Josh Foster and Diana Perfect)*

WELCOME!

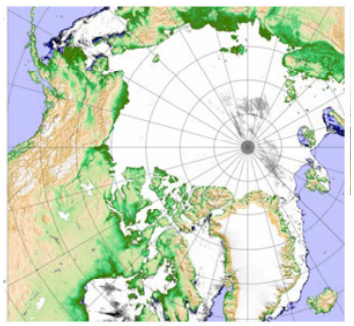
CPO would like to welcome the following people who joined the office during the second quarter. Hetal Jain, serving as Technical Advisor to the CPO Director; David Herring, CPO's new Communications Officer; Mary McCullough, Executive Assistant to the CPO Deputy Director; Claudia Perez, Administrative Assistant to the CPO Climate Observations Division (COD); Derrick Snowden COD Operations Officer; and two Knauss Marine Policy Fellows, Sandy Lucas and Rebecca Feldman.

In addition, Ken Mooney is now a CPO Senior Research Advisor, and Ko Barrett is officially Deputy Director for CPO. CPO also would like to welcome back Candyce Clark who has returned from her detail to the Intergovernmental Oceanographic Commission in Paris.

NOAA Science Advisory Board's (SAB) Reviews the Climate Goal Climate Research and Modeling Program In the fall of 2007, the Climate Goal restructured from five to three programs, Climate Observations and Modeling, Climate Research and Modeling (CRM), and Climate Service Development. The Climate Working Group of the NOAA SAB began to analyze this restructure beginning with a formal review of the CRM Program. The overarching goals of the CRM program are 1) to develop and improve the capability to make multi-temporal scale predictions of climate and 2) to improve understanding of past and present climate change, changes in atmospheric composition, and provide future climate projections from global to regional scales. The efforts of this program will enable regional and national managers to better plan for the impacts of climate variability and change. It will also provide accurate and objective climate assessments and projections to support policy decisions. The fundamental question posed to the CWG was: is the strategy being followed by CRM to address climate research and modeling issues an effective one? If not, what changes in strategy should be made? The review revealed several

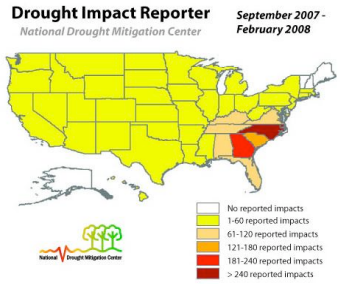
gaps in the current program that will need to be addressed, including: the need for increased computing power, improved coordination between labs for coupled model work, and better integration between and across the Climate Goal programs to ensure the right research and modeling efforts are pursued to lead to a cohesive suite of climate information and products and services. The summary report for the review is expected in July. (*Source: Neil Christerson)*

International Polar Year (IPY) Research on Arctic Aerosol/Ice Melting Connections: ARCPAC Mission Set to Go As a part of IPY, scientists from the Earth System Research Lab (ESRL), the National Environmental Satellite and Data Information Service and other institutions established the Aerosol, Radiation, and Cloud Processes affecting Arctic Climate (ARCPAC) field study. This study focuses on the climate changing characteristics of pollution in the Arctic region. Anthropogenic pollutants from southern continents are transported northward to the Arctic, a phenomenon known as the Arctic Haze. Researching the direct and indirect impact of these aerosols will improve understanding of Arctic climate change. Current observations from various methods indicate that the Arctic is warming faster than average warming rates in other ares. Sea ice cover in the summertime has decreased by about 40% relative to the 1979-2000 average, and the concentration and thickness of the sea ice is also decreasing. ARCPAC will investigate the possible connections between pollution (such as atmospheric fine particles) clouds, and the melting of polar ice in the region. Observations will take place during the first three weeks of April to coordinate with the Polar Study, using Aircraft, Remote Sensing, Surface Measurements and Models, of Climate Chemistry, Aerosols and Transport (POLARCAT). For more information visit: http://www.esrl.noaa.gov. *(Source: http://www.esrl.noaa. gov/csd/arcpac)*



Article highlights SARP in "Basins and Coasts". The January 2008 issue of "Basins and Coasts," published by the U.S. Agency for International Development's Integrated Management of Coastal and Freshwater Systems program, highlights the CPO Sectoral Research Applications Program (SARP) in an article describing the need for and some of the work funded through SARP. In the coastal sector, SARP aims to narrow the gap between science and policy related to global climate change by developing a knowledge base, decision support tools, and capacities and partnerships needed to facilitate adaptation through the use of climate information. Projects must focus on high-priority needs, actively involve stakeholders, employ interdisciplinary teams, and include findings that are transferable to other regions. Lisa Vaughan, one of the SARP program managers, submitted the article. The article can be found at: http://www.imcafs.org /coastsheds/index.php, *(Source: Lisa Vaughan)*

NIDIS Program Manager Briefs Congressional Offices In late March, Roger Pulwarty, program manager of the National Integrated Drought Information System (NIDIS), spent a day briefing various congressional staff offices on the NIDIS program. The NIDIS program is a direct result of the 2006 NIDIS Act and aims to improve the nation's capacity to proactively manage drought-related risks. Roger met with the Majority Staff from the House Select Committee on Energy Independence and Global Warming and the new Minority Staff for the House Science Committee. Staff members were particularly interested in what mechanisms NIDIS uses to coordinate the efforts of its federal, state, tribal, and local partners and how this information is transmitted. In addition, Roger and congressional staff from the House Resources Committee's Water and Power Subcommittee discussed western water, power issues, and management of the Colorado River basin. *(Image: US Drought Monitor) (Source: Josh Foster)*



Recurring Summer North American Upper Tropospheric Ozone Maximum Owen Cooper, along with 21 other scientists at the ESRL, recently published an article in the Journal of Geophysical Research, titled "Evidence for a recurring eastern North America upper tropospheric ozone maximum during summer." The authors describe an experiment in which researchers launched ozone sensors (ozonesondes, balloon-borne instruments that measure ozone concentrations) from 14 sites in North America, daily during August 2006, creating the most extensive set of upper tropospheric ozone measurements ever collected during a single season. Ozone is a strong greenhouse gas that absorbs infrared radiation emitted by the earth. The data collected reveal a region in eastern North America where upper tropospheric ozone levels are substantially higher than those measured above the U.S. West Coast. The concentrations were highest above the southeastern U.S., and this broad region of enhanced ozone recurs from year to year. Its location and ozone concentrations are influenced by the location and strength of an upper tropospheric high pressure system that traps ozone and other gases above the southeastern U.S. This seasonal and regional ozone enhancement is largely of natural origins, and further research is required to understand any possible implications that it has for the climate of the southeastern USA. *(Source: Owen Cooper)*